



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,321	10/12/2001	Akira Okazaki	1776/4066	9517

7590 05/07/2003  
Morgan & Finnegan  
345 Park Avenue  
New York, NY 10154

12  
EXAMINER

HAMPTON HIGHTOWER, PATRICIA

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/890,321

Applicant(s)

OKAZAKI, AKIRA

Examiner

Patricia Hightower

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 1/22/03; 1/9/03.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 82, 83, 85 and 86 is/are allowed.
- 6) ☒ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) 21, 22, 26, 27, 46, 47, 55, 56 and 59-61 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10.
- ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

Continuation of Disposition of Claims: Claims pending in the application are 2-7,12,21,22,26,27,31-37,39,40,46,47,55,56,59-61,71-73,82,83 and 85-88.

***Information Disclosure Statement***

The information disclosure statement filed January 22, 2003 has been considered and has been made of record.

***Response to Amendment***

The amendment filed January 9, 2003 in which claims 1, 4, 11 and 15 were cancelled and claims 87-88 added, is acknowledged. Claims 2, 3, 4, 5, 7, 12, 21-22, 26-27, 31-37, 39-40, 46-47, 55-56, 59-61, 71-73, 82-83 and 85-88 are presently pending. Although in the amendment filed January 9, 2003 the applicant indicated that claim 4 should be canceled; in said amendment the applicant submitted claim 4 as amended 4. Clarification is requested.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 39-40 are newly rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 39-40 the applicant is claiming "a coating" and it is suggested that the applicant insert the term —composition—after "coating".

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2-7, 12, 26-27, 31-37 and 87-88 are newly rejected under 35 U.S.C. 102(b) as being anticipated by Chang (USP 4,188,472) newly cited.

Chang (USP 4,188,472) discloses a curable lactone derived resin which is the reaction product of (a) about 30% - 95% by weight of a lactone modified resin and (b) from about 5% - 70% by weight of an isocyanate; and the lactone derived resins are especially useful for floor tile coatings which are UV curable; which anticipates the claimed invention. See abstract; col. 3, lines 48 – col. 4, lines 1-6; col. 1, lines 54-68 – col. 2, lines 1-5, 10-37, 55-65, 66-68; col. 3, lines 1-35, 36-39, 40-47; col. 4, lines 7-61; col. 5, lines 1-7, 8-9, 14-28, 39-43, 61-68; Example IV, VI; the claims.

Chang teaches at col. 2, lines 55-68, the most preferred lactone starting reactants is the epsilon-caprolactone wherein x in the formula is 4 and all the R's are hydrogen. The lactone is initially modified with an ester containing from 1 to 3 acrylyl or alpha-substituted acrylyl groups and one or two hydroxyl groups, include the hydroxyalkyl acrylates and hydroxyalkylmethacrylates.

The patentee teaches at col. 3, lines 23-68, the esters used to react with the lactone can also be synthesized from an acrylic or methacrylic acid is reacted with an

Art Unit: 1711

epoxy compound. The reaction results in the opening of the epoxy ring to form a hydroxyl group and the epoxy compounds attachmen to the acrylic or methacrylic acid to form an ester. Another ester which can be reacted with the lactone is derived from the reaction of an acrylic acid or methacrylic acid with a polyol. See col. 3, lines 36-40. At col. 5, lines 8-12, the patentee teaches the coating compositions can contain 100 percent of the lactone derived resin. However, a minor amount, i.e., up to 20 percent of a non-reactive solvent can also be included in the composition for further viscosity reduction, flow control, etc.

Claims 21-22, <sup>26-27</sup>~~26-27~~, 46-47, 55-56, and 59-61 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 82-83, 85-86 are allowable.

Applicant's arguments with respect to claims 2-7, 12, 21-22, 26-27, 31-37, 39-40, 46-47, 55-56, 59-61, 71-73, 82-83 and 85-88 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia Hightower whose telephone number is (703) 308-2434. The examiner can normally be reached on 9:30 A.M. -6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703)

Application/Control Number: 09/890,321

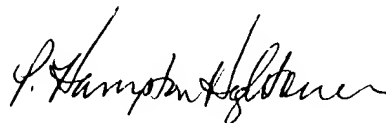
Page 5

Art Unit: 1711

872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

P. Hightower:evh  
April 3, 2003



P. Hampton-Hightower  
Primary Examiner  
Art Unit 1711